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CLAIMS

1. An information processing apparatus for recording an AV stream on a recording medium adapted for recording said AV stream, the Clip information for managing the entity of the AV stream and the PlayList information managing the reproduction of the AV stream, comprising:

means for generating the start address information of a domain in which the encoding information in said AV stream is continuous, the information correlating the time information in said AV stream and the address information, and the time information of a characteristic picture in said AV stream; and

means for recording the information generated by said generating means as said Clip information on said recording medium.

2. The information processing apparatus according to claim 1 wherein the start address information of the domain in which the encoding information in said AV stream is continuous is a start address of the STC sequence or the program sequence;

the information correlating the time information and the address information is EP_map or TU_map; and wherein

the time information of the characteristic picture is ClipMark.

3. The information processing apparatus according to claim 1 wherein the recording means further records the information pertinent to an average value of the recording rate of said AV stream on said recording medium.

4. The information processing apparatus according to claim 3 wherein the information

pertinent to an average value is TS_average_rate.

5. The information processing apparatus according to claim 1 wherein the AV stream is a transport stream.

6. The information processing apparatus according to claim 1 wherein the start address information of the domain in which the encoding information in said AV stream is continuous includes a start address of an STC sequence which is a domain where system time clocks of said transport stream are continuous.

7. The information processing apparatus according to claim 1 wherein the start address information of the domain in which the encoding information in said AV stream is continuous includes a start address of a program sequence which is a domain where program contents of said transport stream are constant.

8. The information processing apparatus according to claim 1 wherein the start address information of the domain in which the encoding information in said AV stream is continuous includes a start address of a domain where the arrival time based on the arrival time of a transport packet of said transport stream is continuous.

9. The information processing apparatus according to claim 1 wherein the information correlating the time information and the address information includes an address of an I-picture of said transport stream and its presentation time stamp.

10. The information processing apparatus according to claim 9 further comprising:

    compression means for compressing at least part of the information correlating the time information and the address information in said AV stream;

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said recording means records said information compressed by said compression means.

11. The information processing apparatus according to claim 1 wherein the information correlating the time information and the address information in said AV stream includes an arrival time based on the arrival time of a transport packet and an address in said AV stream data of a transport packet associated therewith.

12. An information processing method for recording an AV stream on a recording medium, adapted for recording said AV stream, the Clip information for managing the entity of the AV stream and the PlayList information managing the reproduction of the AV stream, comprising:

a step of generating the start address information of a domain in which the encoding information in said AV stream is continuous, the information correlating the time information in said AV stream and the address information, and the time information of a characteristic picture in said AV stream; and

a step of recording the information generated by said generating step as said Clip information on said recording medium.

13. A recording medium having recorded thereon a computer-readable program for an information processing apparatus, adapted for recording an AV stream on a recording medium, carrying said AV stream, the Clip information for managing the entity of the AV stream and the PlayList information managing the reproduction of the AV stream, said program including

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a step of generating the start address information of a domain in which the encoding information in said AV stream is continuous, the information correlating the time information in said AV stream and the address information, and the time information of a characteristic picture in said AV stream; and

a step of recording the information generated by said generating step as said Clip information on said recording medium.

14. A program for causing a computer controlling an information processing apparatus, adapted for recording an AV stream on a recording medium, the Clip information for managing the entity of the AV stream and the PlayList information managing the reproduction of the AV stream, to execute

a step of generating the start address information of a domain in which the encoding information in said AV stream is continuous, the information correlating the time information in said AV stream and the address information, and the time information of a characteristic picture in said AV stream; and

a step of recording the information generated by said generating step as said Clip information on said recording medium.

15. An information processing apparatus for reproducing an AV stream from a recording medium having recorded thereon said AV stream, the Clip information for managing the entity of the AV stream and the PlayList information managing the reproduction of the AV stream, comprising:

means for reproducing the start address information of a domain in which the

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encoding information in said AV stream is continuous, the information correlating the time information in said AV stream and the address information, and the time information of a characteristic picture in said AV stream, as said Clip information; and

means for controlling the outputting of said AV stream based on said Clip information reproduced by said reproducing means.

16. An information processing method for reproducing an AV stream from a recording medium, having recorded thereon said AV stream, the Clip information for managing the entity of the AV stream and the PlayList information managing the reproduction of the AV stream, comprising:

a step of reproducing the start address information of a domain in which the encoding information in said AV stream is continuous, the information correlating the time information in said AV stream and the address information, and the time information of a characteristic picture in said AV stream; and

a step of controlling the outputting of said AV stream based on said Clip information reproduced by said reproducing means.

17. A recording medium having recorded thereon a computer-readable program for an information processing apparatus adapted for reproducing an AV stream from the recording medium, on which said AV stream, the Clip information for managing the entity of the AV stream and the PlayList information managing the reproduction of the AV stream are recorded;

said program including

a step of reproducing the start address information of a domain in which the encoding information in said AV stream is continuous, the information correlating the time information in said AV stream and the address information, and the time information of a characteristic picture in said AV stream; and

a step of controlling the outputting of said AV stream based on said Clip information reproduced by said reproducing means.

18. A program for causing a computer controlling an information processing apparatus for reproducing an AV stream from a recording medium to execute

a step of reproducing the start address information of a domain in which the encoding information in said AV stream is continuous, the information correlating the time information in said AV stream and the address information, and the time information of a characteristic picture in said AV stream; and

a step of controlling the outputting of said AV stream based on Clip information reproduced by said reproducing means; said recording medium having recorded thereon said AV stream, said Clip information for managing the entity of the AV stream and PlayList information managing the reproduction of the AV stream.

19. A recording medium having recorded thereon a program for an information processing apparatus for reproducing an AV stream from a recording medium on which said AV stream, the Clip information for managing the entity of the AV stream and the PlayList information managing the reproduction of the AV stream are recorded; wherein

the start address information of a domain in which the encoding information in said AV stream is continuous, the information correlating the time information in said AV stream and the address information, and the time information of a characteristic picture in said AV stream are recorded on the recording medium as said Clip information.